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ABSTRACT

In research in the teaching of writing, feedback--information about a performance which influences future performance--appears often to be a factor, but it is rarely adequately described, defined, or controlled. The first section of this paper identifies possibly important aspects of feedback as it relates to the teaching of writing. Feedback may be categorized as abstract or specific, as positive, negative, or corrective, and as task related to task unrelated. The amount of feedback given may be important, as may be the conditions by which feedback is provided and the source from which it comes (teacher or peer). In the second section, the authors review the research on feedback, noting that relatively few aspects of feedback have been investigated and that, except for a few studies, no attempts have been made to control for and to compare the relative effects of particular aspects of feedback. The final section of the paper presents implications of the research and points out the need for further research which controls strictly for a limited number of aspects of feedback. (GW)

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CS 203 515

RESEARCH ON THE EFFECT OF FEEDBACK ON WRITING: REVIEW AND IMPLICATIONS

ABSTRACT

Feedback has been a problematic factor in research in instruction in writing. Experience and a reading of discussions on teaching suggest that teachers provide a wide and often conflicting variety of kinds of feedback. The value of much research has been reduced by a lack of control for, and clear description of, the feedback provided to subjects, and very few studies have compared the relative effects of particular aspects of feedback. In spite of the problems, a review of the research suggests strongly that a particular approach to feedback may be highly effective and merits further research: selective, task-related feedback, controlled by measurement instruments, and provided by students to themselves and to their peers.

Research on the Effect of Feedback on Writing:

Review and Implications

Research in the teaching of writing has been contradictory in its findings and apparently of little aid to teachers. The authors of a major review of research, Braddock, Lloyd-Jones, and Schoer, (5), concluded that research has often been poorly designed or poorly described. A major difficulty noted has been the many variables that may affect students' writing. Braddock, Jones, and Schoer commented that "there are many variables to control in research with written composition. There are so many that it is an unusual study which does not leave several important variables uncontrolled or undescribed." (p.55).

One variable which may be of great importance in instruction in writing is feedback, or information about a performance which influences future performance. It appears that, in studies of instruction, feedback is often a factor, but is rarely adequately described, defined, or controlled. This discussion has three purposes: (1) to identify possibly important aspects of feedback as it relates to writing; (2) to review research that has, to some extent, considered the effect of feedback; and (3) to suggest a direction for further research in feedback.

Aspects of Feedback

"Feedback" is generally defined as information about performance or as knowledge of results. Some theorists and researchers have narrowed the general definition somewhat. For example, Brethower (6) and Olds (19)

have defined feedback in terms of its function: feedback is not just any information on a performance, but information that has an effect on the performance; i.e., that maintains or modifies the performance. The effect may be one of reinforcement (e.g., it may maintain or increase the number of words written); or it may be one of extinction (e.g., it may reduce or eliminate misspelled words.)

Olds and Brethower provide a helpful starting point; however, there remains much to consider. Writing is a complex performance; there are many behaviors to be affected. As an illustration of the complexity, one can speculate that any one instance of feedback might have both desirable and undesirable effects; e.g., information about number of spelling errors might reduce the number (a desirable effect) but, at the same time, might reduce the total number of words written (undesirable).

A look at the ways any group of teachers responds to papers, or, for that matter, the ways any one teacher responds to one paper, suggests that students receive a variety of types and amounts of information under a variety of conditions. As a guide in examining research on feedback on writing, an identification of different types, amounts, and conditions is helpful.

Feedback may be categorized as relatively general information or relatively specific: "Underdeveloped" or "Poor Spelling" (general) as opposed to "You wrote only 200 words" or "8 misspellings" (specific). A similar way of categorizing feedback is in terms of abstract or concrete information. "Underdeveloped" is abstract; "8 misspellings" is concrete.

Feedback may be both abstract and general, e.g., "unacceptable grammar;" but it can also be abstract and (comparatively) specific; e.g., "This group of words is a fragment." To make the feedback both specific and concrete, the concept of "fragment" would have to be described or explained in concrete terms: "When they arrived. is a fragment because it starts with a word like when and ends with a period."

Feedback also may be categorized as positive, negative, or corrective. Positive feedback informs the writer of what he has done successfully; it notes the presence of, or describes, desired behaviors: "192 words out of 200 are spelled correctly," or "Good work on spelling." Negative feedback does the opposite: "8 misspellings" or "Poor spelling." Corrective feedback, like negative, also notes the absence of a desired behavior but includes some sort of help or suggestion for correcting the problem. For example, instead of simply circling a misspelling, the teacher might write in the correct spelling, write out a rule for that spelling problem, or suggest a way of proofreading for spelling errors.

Finally, information can be categorized as task-related or task-unrelated. The former would be any information directly related to the elements of the task, or the desired qualities involved in doing the task successfully, as identified in the instructions and requirements for the writing assignment. For example, the instructions for an essay might be: "Write a five-hundred word essay. Present one thesis, develop that thesis by breaking it down into at least three points, and support each point." Task-related feedback would note number of words, the presence or absence of a thesis, the number of points, perhaps the relationship of the points to the thesis, and the presence or absence of supporting statements. Task-unrelated feedback might note spelling,

sentence structure, usage, or fine points of style.

Since writing involves very many behaviors, the question of amount of feedback may be important. A teacher has at least three alternatives: (1) provide information on every possible aspect of writing on each assignment whether those aspects are task-related or not; (2) limit comments to aspects identified as basic elements of the task; or (3) limit feedback to one task-related element for each assignment.

A reading of discussions of teaching writing (as contrasted with research on writing) in journals and "methods" books suggests that much thought has been given to the particular conditions by which feedback is provided, irrespective of the content or type of feedback. Consideration has been given to the comparative benefits (1) of using editing symbols versus writing out comments, (2) of written comments versus spoken comments (via tape recorder or personal conference), and (3) of marginal versus terminal comments. Questions have been raised as to the use of the feedback by students: Should students have the opportunity to (or be required to) rewrite papers in light of the feedback? Should they compare papers over a period of time in light of feedback? Should these comparisons be made by keeping a folder of assignments, a checklist of errors, or a progress chart? Another condition considered is the timing of the feedback. Should students receive feedback immediately after completing an assignment and/or immediately before starting the next one? Or, will feedback delayed for days or weeks, while the teacher reads the papers, still be effective?

A final aspect of feedback, also given much consideration in discussions of the teaching of writing, has been the source of the information. Traditionally, the teacher has been the primary or sole source of responses to students' writing; recently many educators have argued in favor of peer-feedback. A third alternative is self-provided feedback, whereby the students are given the means to record information about their own performance, e.g., with graphs or checklists.

Research on Feedback

A review of the research leads to two conclusions about what researchers have attempted so far. First, of the many aspects of feedback noted above, relatively few have been investigated. Second, except for a few studies, no attempts were made to control for and to compare the relative effects of particular aspects of feedback. No studies measured the effects of general versus specific feedback, abstract versus concrete, task-related versus task-unrelated, immediate versus delayed, or feedback from all three sources--teacher, peer, and self-provided.

Three studies involving the use of negative feedback reported no significant changes (3, 7, 11). No comparison was made with positive feedback. In one of these studies, there was also an investigation of the effects of amount of feedback. One group received "moderate evaluation" (in which the errors marked were limited to particular skills students were studying); a second group received "intensive evaluation" (in which every error was marked); no significant differences were found (7, p. 28). The effect of selective feedback (information on only one skill) was not investigated.

Four studies (8, 13, 14, 24) compared positive and negative feedback. They reported that positive feedback resulted in more favorable attitudes toward writing than did negative feedback, but found no significant effect on quality of writing. Biberstine (4) reported that negative feedback had a negative effect on students' attitudes, and that positive comments lost value when surrounded by negative comments; no data on effect on writing quality was presented.

All the studies noted so far did not indicate whether or not the feedback was task-related. One study, by Wolter (25), which measured effects of different ways of providing task-related feedback, reported significant changes in writing by students who received positive feedback.

In the same study, Wolter (25) compared the effects of positive feedback with corrective feedback and with no feedback. The groups receiving positive feedback and corrective feedback both showed significant gains. Schroeder (22) also compared the effects of corrective and positive feedback and found that both groups showed positive gains; he did not report whether or not the differences were significant. Seidman (23) studied the effect of corrective feedback and reported that the group receiving such feedback, compared to a group receiving no feedback, showed more motivation as measured by the number of optional drafts and revisions written. He did not, however, report whether the quality of writing improved.

Two studies investigated the effects of taped comments (as an alternative to written feedback). Coleman (9) reported that the tapes were more effective for students who scored low on a writing pre-test. Andre (2) compared the effects on two groups and found no significant

difference; he did report that students said they liked the taped comments and that they believed them to be effective.

One study by McColly (17), which investigated a variety of methods for teaching writing, reported that immediate feedback, presented in a tutoring situation, was not effective. The content of the feedback and the exact procedures by which it was presented were not explained. In Wolter's study (25), noted earlier, the groups receiving positive and corrective feedback received the feedback immediately before they started work on their next assignment. Neither McColly not Wolter compared the effects of feedback presented at different lengths of time, either before or after an assignment.

Two studies involved the use of feedback by students in rewriting papers. Neither Fellow's study (11) nor a study by Effros (10) found significant differences between groups who revised papers and those who did not.

Six studies investigated the effects of peer-feedback on improvement in writing. Two studies (1, 20) found no significant differences between groups receiving peer and teacher-feedback. Lagana (15) reported the peer-feedback group made greater gains in three qualities than did a teacher-feedback group, but did not report significance of differences. Ford (12) reported that a peer-feedback group made greater gains on a grammar-usage test, but did not find significant differences. Two studies (18, 21) of peer-feedback involved an attempt to control the feedback by

training students to use a rating scale for their own and their peers' papers; both reported significant differences between experimental and control groups.

Wolter ((25), in his study noted earlier, also controlled the feedback provided to different groups by means of a form which listed specific writing behaviors for which information was to be provided. The teachers, who provided corrective feedback to one group and positive, to another, followed the form. A third group of students received no feedback from teachers, but provided themselves with feedback, using the same form, and showed significant gains. An earlier study by Lamberg (16), which led to Wolter's procedures, investigated the effect of programmed instruction in narrative writing. Built into the instruction was a feedback form, similar to Wolter's, which insured that students would give themselves positive, task-related feedback. The students showed significant gains.

Implication for Further Research

A review of the research leads one to suspect that certain aspects of feedback do not have desirable effects: negative feedback (the noting of the absence of desired qualities), provided in moderate or large quantity, in the form of written comments by teachers. Such a conclusion must be tentative because none of the studies of those aspects attempted to control strictly the type and content of the feedback. This failing may reflect traditional practice; it has been only recently that teachers have begun to make systematic attempts to identify basic elements of tasks by specifying measurable performance objectives. With such objectives, consistent and selective task-related feedback may be more likely.

Those studies which did show promising results involved the use of measurement instruments which provided for stricter control of the type and content of feedback. In Wolter's study, teachers and students were trained to use the same feedback form which was based on a task-analysis of narrative writing. The studies on peer-feedback that showed significant positive results also involved training students to use a measurement instrument.

Another implication of those studies is, in hindsight, a simple idea: if feedback, or information on performance, is to have desired effect, students have to understand it; it has to, indeed, inform them. When students are trained to give themselves or their peers feedback, it may be more likely that they will understand the information than when they are dependent upon a variety of responses from their teachers, and they are less likely to ignore or dismiss information they have provided.

Further research is needed, especially since teachers seem to continue to use a variety of ways of providing feedback. In fact, a productive area for research would be in determining common practices by teachers as well as in determining what variables influence the kind of feedback teachers provide; e.g., does the use of measurable performance objectives lead to use of selective task-related feedback? Since positive feedback has been reported to have a positive effect on attitudes, long-range studies seem warranted to determine the effect of positive attitudes on improvement. Since there have been mixed results in studies (involving negative, positive and corrective feedback), it would be useful to test the hypothesis that students with differing skills may benefit from different kinds, amounts, and conditions of feedback and to attempt to pin down those differences. Such research

will need to control strictly for a limited number of aspects of feedback, if results are to be helpful.

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